

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1. (currently amended)      A package supporting structure for a chip, comprising:  
a supporting substrate with a bond opening therein;  
an interconnect layer on the supporting substrate, in which a bonding channel  
overlapping with the bond opening is formed; ~~and~~  
a chip mechanically fixed to the interconnect layer to cover the bonding channel;  
an encapsulation material arranged in the bonding channel; and  
an escape prevention structure for the bonding channel, to enable escaping of air from  
the bonding channel and to substantially prevent the encapsulation material from escaping  
from the bonding channel ~~on introducing encapsulation material into the bonding channel~~  
~~after the applying of a chip to the supporting structure.~~

Claim 2. (currently amended) The package supporting structure of claim 1, wherein the escape  
prevention structure is designed to prevent escaping of the encapsulation material due to the  
capillary effect.

Claim 3. (currently amended) The package supporting structure of claim 1, wherein the escape  
prevention structure includes an opening with such a cross-sectional area, so that escaping of  
the encapsulation material caused by the capillary effect is prevented.

Claim 4. (currently amended) The ~~package supporting structure~~ of claim 1, wherein the bonding channel is open at a lateral end, wherein the escape prevention structure is formed at the lateral end by a barrier structure for reducing a cross-section of the bonding channel at the lateral end.

Claim 5. (currently amended) The ~~package supporting structure~~ of claim 4, wherein the barrier structure is connected to the interconnect layer.

Claim 6. (currently amended) The ~~package supporting structure~~ of claim 4, wherein the barrier structure is formed integrally with the interconnect layer.

Claim 7. (currently amended) The ~~package supporting structure~~ of claim 4, wherein the barrier structure extends across the entire width of the bonding channel.

Claim 8. (currently amended) The ~~package supporting structure~~ of claim 4, wherein the barrier structure is formed, so that a cross-section of the bonding channel tapers in a direction to the lateral end.

Claim 9. (currently amended) The ~~package supporting structure~~ of claim 4, wherein the barrier structure has a convex shape.

Claim 10. (currently amended)      The ~~package supporting structure~~ of claim 4, wherein the barrier structure is disposed in the bonding channel and spaced from the interconnect layer.

Claim 11. (currently amended)      The ~~package supporting structure~~ of claim 1, wherein the escape prevention structure includes a recess in the supporting substrate.

Claim 12. (canceled)

Claim 13. (currently amended)      The ~~package supporting structure~~ of claim 11, wherein the interconnect layer is disposed on a surface of the supporting substrate, wherein the recess on the surface extends across a sidewall of the bonding channel.

Claim 14. (currently amended)      The ~~package supporting structure~~ of claim 11, wherein the recess is disposed in a region of the bonding channel, wherein the recess extends from a first surface of the supporting substrate to a second surface of the supporting substrate.

Claim 15. (canceled)

Claim 16. (withdrawn)      A method for producing a supporting structure for a chip, comprising:

preparing a supporting substrate with a bond opening;

creating an interconnect layer on the supporting substrate, so that a bonding channel is formed in the interconnect layer; and

creating an escape prevention structure for the bonding channel, so that the escape prevention structure is formed to enable escaping of air from the bonding channel and to prevent the encapsulation material from escaping from the bonding channel on introducing encapsulation material into the bonding channel after the applying of a chip to the interconnect layer.

Claim 17. (withdrawn)      The method of claim 16, wherein the step of creating an interconnect layer includes creating a frame on the supporting substrate, and the step of creating an escape prevention structure includes deepening the frame for forming a vent flute in the frame.

Claim 18. (withdrawn)      The method of claim 16, wherein the step of creating an interconnect layer comprises creating a frame on the supporting substrate, and the step of creating an escape prevention structure comprises the step of applying a spacer to the frame.

Claim 19. (withdrawn)      The method of claim 16, wherein the step of creating an interconnect layer includes structuring the interconnect layer and subsequently depositing the structured interconnect layer onto the supporting substrate.

Claim 20. (withdrawn)      The method of claim 16, wherein the step of creating an interconnect layer includes printing the interconnect layer onto the supporting substrate.

Claim 21. (withdrawn)        The method of claim 16, wherein the step of creating the interconnect layer includes creating an interconnect layer with a bonding channel with a lateral open end, and the step of creating the escape prevention structure includes creating a barrier structure at the lateral open end.

Claim 22. (withdrawn)        The method of claim 21, wherein the step of creating the interconnect layer and the step of creating a barrier structure take place concurrently.